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The Annual Meeting of Stockholders will be held at 2 p.m. on May 22, 1974, at the Executive Offices of the company, Lexington, Massachusetts. Notice of the meeting and proxy material will be sent to stockholders in April.

This Annual Report is submitted for the general information of the stockholders of Raytheon Company and is not intended for use in connection with any sale or purchase of, or as an offer or solicitation of offers to buy or sell, any securities.

Raytheon Company
141 Spring Street
Lexington, Massachusetts 02173

Comparative Highlights

	1973	1972
Net sales	\$1,590,461,000	\$1,465,031,000
Income before extraordinary item	\$ 46,162,000	\$ 41,174,000
Extraordinary item	—	\$ 3,275,000
Net income	\$ 46,162,000	\$ 37,899,000
Earnings per common share:		
Income before extraordinary item	\$3.03	\$2.59
Extraordinary item	—	(.21)
Net income	\$3.03	\$2.38
Cash dividends paid:		
Common stock	\$ 9,914,000	\$ 9,370,000
Per share	\$.65	\$.60
Net working capital	\$ 247,107,000	\$ 236,051,000
Net property, plant and equipment	\$ 148,580,000	\$ 136,180,000
Stockholders' equity:		
Total	\$ 356,138,000	\$ 336,013,000
Per common share	\$23.79	\$21.59
Outstanding shares of common stock:		
At end of year	14,971,613	15,564,578
Average outstanding during year	15,217,912	15,898,052
Stockholders of record	22,864	24,736
Backlog:		
Total orders	\$1,421,112,000	\$1,008,634,000
U.S. Government funded orders included above	\$ 653,256,000	\$ 542,345,000



Karsh, Ottawa

Charles F. Adams
Chairman of the Board

Thomas L. Phillips
President and
Chief Executive Officer

D. Brainerd Holmes
Executive Vice President

To Our Stockholders

In 1973, Raytheon had the best year in its history. Earnings per share were up 17 per cent over 1972 on a sales increase of 8.6 per cent. For the first time, sales exceeded \$1.5 billion (\$1,590,461,000). Sales, operating earnings, and earnings per share were all record highs. Our orders received during 1973 were such that at year end the backlog was the highest in the company's history – more than \$1.4 billion.

Government Business

Raytheon accelerated its production of Improved Hawk, and the U.S. Army continued its operational deployment during 1973. Early in 1974, we completed negotiations with a six-nation consortium of NATO members for a program of approximately \$660 million to modernize their air defenses with the Improved Hawk system. Approximately 60 per cent of the program will be performed by Raytheon and 40 per cent by European firms.

SAM-D, the Army's advanced surface-to-air missile system for the 1980's, is now in engineering development at Raytheon. The program has been restructured to place greater emphasis on early flight testing of the guidance system of engineering model missiles. Preliminary aerodynamic and control flight tests conducted at White Sands Missile Range in New Mexico to date were successful, and our development program has been proceeding well.

Two other programs, long in research and development, passed the test and evaluation stages, and we placed them in production late in the year. These are NATO Seasparrow, a joint program of the U.S. Navy and several other NATO navies, for small ship defense; and, for the U.S. Air Force, the TPN-19, a modern, portable system for ground-controlled approach (GCA) aircraft landings. Three major new programs were begun in 1973: For the Air Force, Raytheon was selected to design and construct the Cobra Dane surveillance radar in Alaska. For the Navy, Raytheon was chosen, along with one other company, to develop an advanced surface ship countermeasures system under the new design-to-price concept. Also for the Navy, we began a program to test and evaluate the Raytheon-developed DE-1160 sonar for use on the new patrol-frigate class of vessels.

Commercial Business

The year 1973 was one of good progress company-wide in commercial electronics businesses, especially semiconductors and data systems.

The semiconductor industry had a year of unprecedented growth, and Raytheon participated actively in it. There were new products, new key accounts and new markets for integrated circuits. We were successful in entering three new markets: automotive, medical, and communications. At year end, our backlog was at an all-time high.

The PTS-100 programmable terminal system, now in its second year of production, gained wider acceptance during 1973 and is now being used in such diverse operations as banks, the nation's major credit bureaus, the Midwest Stock Exchange and a dozen leading airlines around the world. A new general-purpose minicomputer and a powerful array transform processor also were introduced to serve growing needs in petroleum exploration and other industrial applications.

Medical electronics, a new venture to supply nuclear scanning equipment to hospitals, had operating and non-recurrent problems. By year end, several corrective steps had been taken.

For the second consecutive year, the major appliance portion of Raytheon's business – Amana and Caloric – achieved a 20 per cent growth in both sales and earnings. Amana's year was punctuated by an issue of *Consumer Reports* indicating possible radiation hazards connected with microwave ovens. Amana countered by providing the press with facts on radiation protection built into Radarange® microwave ovens and succeeded in restoring customer confidence.

Our three energy-related subsidiaries – Badger, Seismograph and United Engineers – benefited during the year from increased activity to meet world energy demands.

Badger replenished a depleted backlog with a record intake of orders. Such orders included those for refineries and plants to produce petrochemicals and fertilizer in countries around the world.

United won new orders for nuclear and fossil-fueled power plants, and Seismograph increased its seismic processing centers and deployed a new exploration vessel.

Iowa Manufacturing Company, manufacturer of heavy construction equipment, completed its second year as a Raytheon subsidiary and posted a 15 per cent sales growth. D.C. Heath, our educational publisher, had a turnaround year, with gains being posted in both the School and College Divisions.

Corporate Events

During 1973, Raytheon sold its 18 per cent share of Selenia to Finnmeccanica, thus closing out its operations in Italy. The acquisition of Lacroix & Kress in West Germany was completed earlier in the year. Lacroix & Kress is a manufac-

turer of fine magnet wire and complements Sterling Cable in the United Kingdom. In making these moves, Raytheon shifted its emphasis in Europe away from government markets and toward commercial markets.

Early in the year, the Board of Directors authorized the repurchase of a specified number of Raytheon shares in the open market and in third market trading. A total of 625,900 shares was acquired between March and August at an average cost of \$26.26 per share.

As this report was being prepared, we were saddened by the loss of one of our valued directors. The sudden and untimely death of Eli Goldston has been mourned by all of his colleagues at Raytheon. We shall miss him.

We are cautiously optimistic as we enter the new year. With the economy simultaneously affected by a high rate of inflation and energy-induced slowdowns, it is difficult to predict very far ahead.

Yet a strong 1973 has provided most of Raytheon's diverse businesses with good momentum entering 1974. This should carry to another year of increased sales and earnings. Our previously announced goals for 1975 continue to look achievable.

Thomas Z. Phillips

President

Charles Adams

Chairman

February 5, 1974

	1973	1972
Net Sales	\$940,800,000	\$818,900,000
Income before Taxes	\$ 42,200,000	\$ 40,300,000

Electronics, applied to both government and commercial markets, continues as Raytheon's principal business and primary source of revenue. In 1973, sales of electronic systems and products rose 15 per cent to a record level.

Government Systems

Increased sales of the Improved Hawk surface-to-air missile system provided major thrust for the year's gains. In 1973, the U.S. Army's second Improved Hawk battalion was made operational. Full acceptance of the Raytheon-developed system by the U.S. military has resulted in major orders from the U.S. Army and from other Free World governments. In January 1974, for example, a six-nation consortium of NATO members placed an Improved Hawk production order of about \$660 million. About 60 per cent of the contract will be performed by Raytheon; the balance will be performed in Europe under Raytheon system management.

Development work on the SAM-D surface-to-air missile system, another major program for which Raytheon is prime contractor, moved ahead as the Middle East war focused increased attention on the importance of surface-to-air missiles. The year's highlights included satisfactory missile launches from factory-sealed canisters and a successful control test, during which the missile responded to programmed commands and maneuvered in flight. Although the SAM-D program was restructured early in 1974 to concentrate on flight testing, the Army continues to bank on SAM-D to meet its air-defense needs in the 1980's and beyond.

Raytheon-produced advanced Sparrow air-to-air missiles successfully completed the test and evaluation phase and were launched from the two fighter aircraft for which they are designated as primary defensive armament: the Air Force F-15 and the Navy F-14. Operational testing prior to full-scale production is continuing.

Successful development of the NATO Seasparrow shipboard missile system led to an initial \$107 million production contract



The Federal Aviation Administration continues installing Raytheon-built equipment at its enroute air-traffic control centers, including this one near Kansas City. When equipment is in and operating, Raytheon displays like those shown will automatically provide controllers with aircraft identities, speeds and altitudes, and weather information.





Raytheon engineers run vibration test on the Improved Hawk missile. In 1973, the company received major new orders for Improved Hawk. Deployment of the system by the U.S. Army continued during the year.



Computer-controlled "light spot" aids production of complicated Improved Hawk circuits. Innovative manufacturing techniques in government programs help boost product reliability and enhance cost performance. Not only does Raytheon benefit; indirectly, so do U.S. taxpayers.



from a six-nation NATO consortium, which includes the United States. Sixty-two systems are covered by current contracts. Raytheon is prime contractor. Demonstration vertical launches of the Sparrow also occurred in the year. This development could have significance in future ship-defense systems.

The Tartar-D air-defense-missile fire-control system, for which Raytheon is prime contractor, was installed aboard the *USS California*, a nuclear destroyer leader. Three additional Tartar systems were delivered to the Navy for installation aboard similar vessels, and another was ordered.

The Raytheon-developed fire-control system for the Navy's Aegis air-defense program, for which RCA is prime contractor, underwent successful land-based tests. Sea tests are scheduled for 1974 aboard the *USS Norton Sound*.

The company's development work on improved missile-guidance techniques continued. One noteworthy result was successful testing of a guidance system utilizing a new synthetic-aperture seeker. Three out of three destroyer-launched missiles using the system made direct hits on an over-the-horizon floating target.

Raytheon expanded its facilities at Santa Barbara, Calif., to keep pace with the growing electronic warfare systems market. Company participation in this market has centered primarily on the ALQ-99 transmitter-exciter program, which is expected to continue at high levels over the next five years.

In addition to work on this and similar airborne electronic countermeasures programs, significant entries have been made into both land- and ship-based electronic warfare systems. Raytheon was selected by the Navy under the new design-to-price concept as one of two companies to develop an advanced surface-ship countermeasures system. This system will utilize the company's proprietary dielectric lens-array antennas and is being developed for a wide range of surface vessels and for helicopter-borne applications. The company-developed multi-beam technology is also being considered for an Army program.

Production of advanced computer display equipment for the Federal Aviation Administration's enroute air-traffic control centers continued. By year end, 17 FAA enroute centers had their computer display channel and radar subsystem equipment. Seven of the 17 had achieved initial operating capability. Equipment at all centers is to be in full operation in 1975.

Meanwhile, a modified plan view display is being developed for other markets. It is controlled by a minicomputer rather than by



Engineer checks missile launcher of NATO Seasparrow.

a large central computer such as that used in the FAA system for monitoring U.S. airspace. This new system will be offered overseas for air-traffic control. Other potential commercial and industrial applications are being explored.

Also in the area of air-traffic control, the Air Force in 1973 authorized Raytheon to produce nine complete AN/TPN-19 ground-controlled all-weather aircraft-landing systems. The total procurement to date is worth \$32.5 million.

The TPN-19 now in production is a tactical system requiring minimum size and weight, along with quick stowing and assembly for airlift mobility. For nontactical uses, a modified but less expensive version is under design. If this new version is successful, it should help expand the market – particularly overseas, where the potential looks promising.

One of the world's largest radars, a phased-array type, will be built by Raytheon under a new Air Force contract. Designated Cobra Dane and located at Shemya Air Force Station in Alaska, the giant radar will be capable of multiple-object tracking.

Another interesting but more conventional radar was tested during the year. Designated the AN/SPS-49, it was selected by the Navy as its shipboard long-range radar for air search. Developed about 10 years ago, this system has been updated extensively to improve its performance. Important potential uses are aboard destroyers with guided missile capability and on ships in the Navy's new patrol-frigate class.

For the same class of ships, Raytheon won a contract to test and evaluate its new DE-1160 sonar. Upon successful completion of 1974 tests, the Navy has an option to order 25 of these systems in 1975. Meanwhile, several European nations have shown strong interest in this sonar for patrol frigates and smaller vessels.

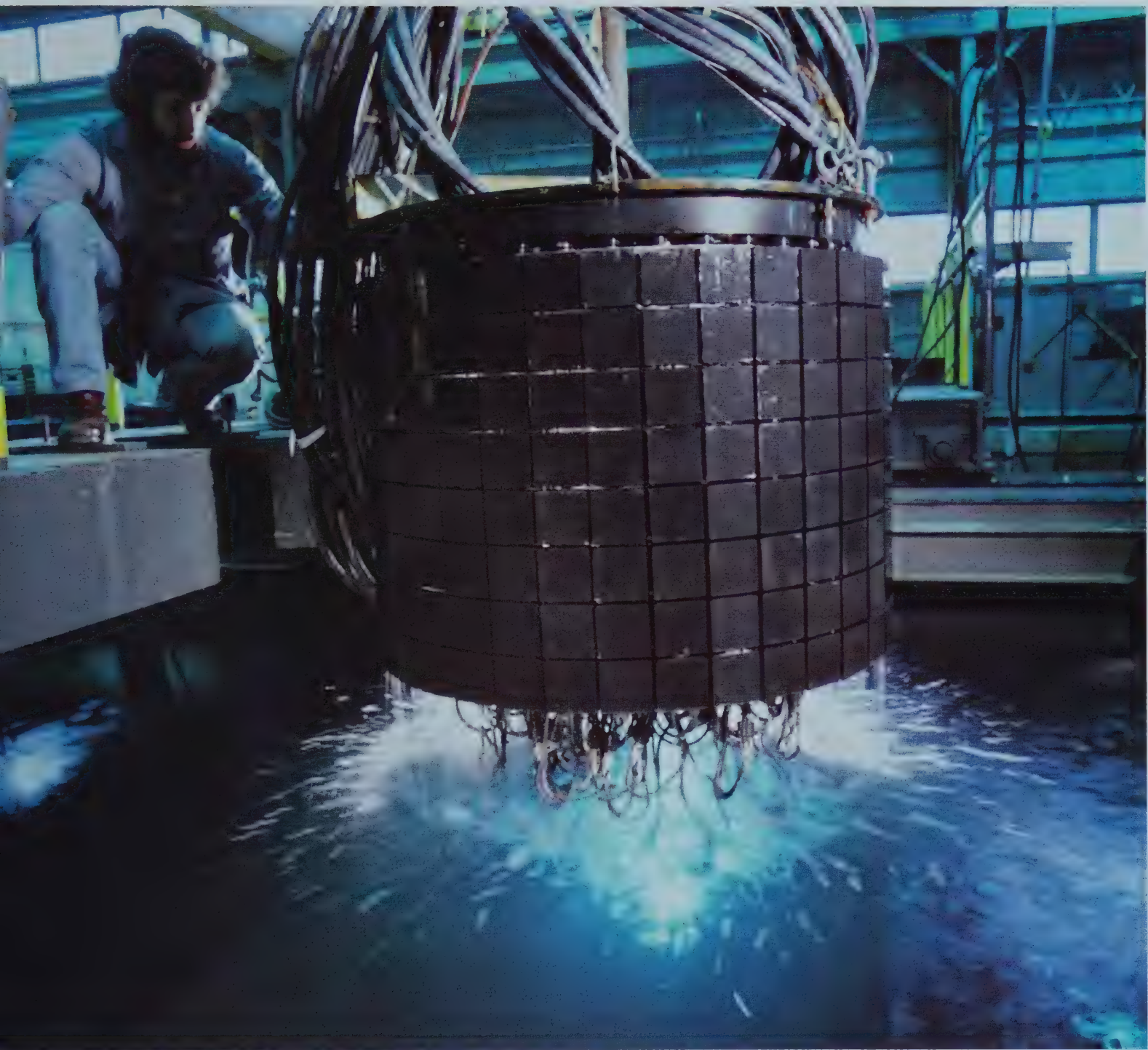
In another 1973 sonar development, Raytheon is under contract to produce a line of depth sounders to operate on nonlinear acoustic principles, which the company has been investigating for two years. The first sounders produced are to be installed on nuclear submarines.

In military communications, Raytheon is participating in the development of millimeter-wave communications terminals for satellite communications from aircraft and ships. Development work also continues on ground terminals for the Army's Time Division Multiple Access satellite communications program.



Assembly of counter-measures equipment at Santa Barbara.

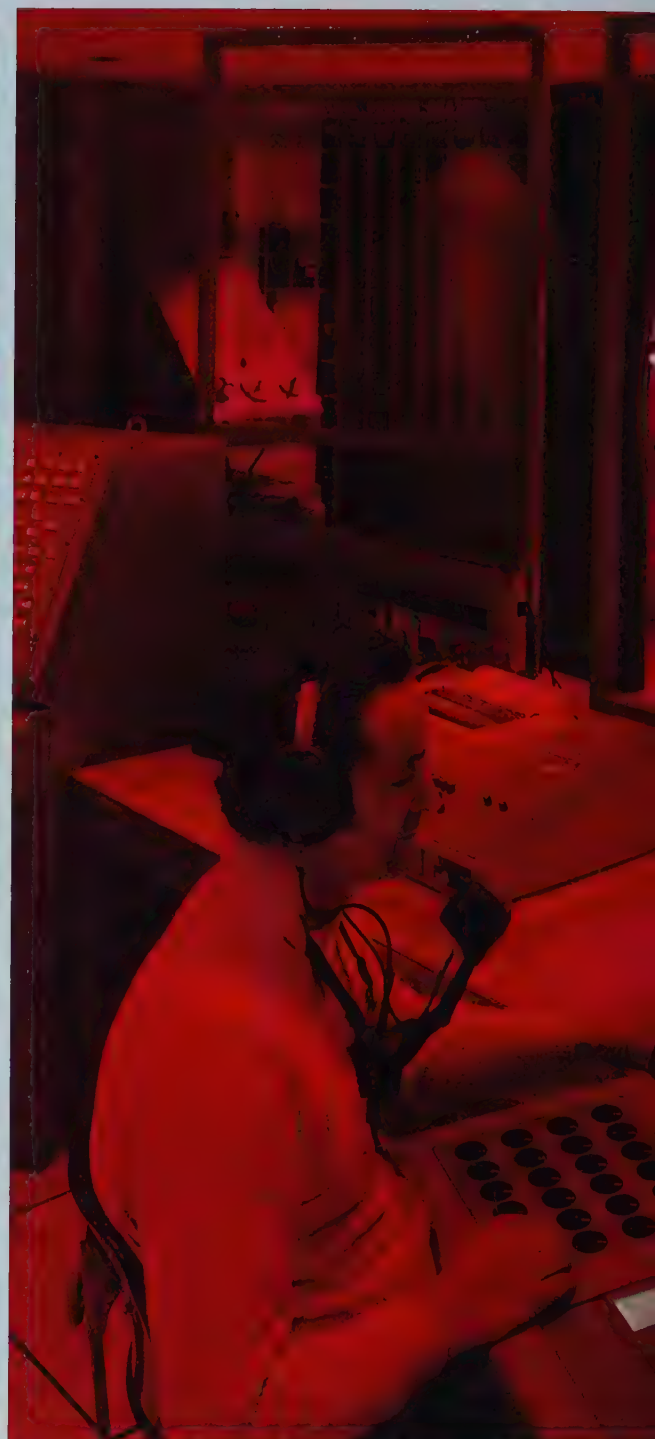
Precision-approach radar helps the Raytheon-developed TPN-19 landing system simultaneously track and control as many as six aircraft through final approach and landing. TPN-19 components are easily transported and in about an hour can be readied for operation in any kind of weather.



Sonar transducer for U.S. Navy patrol frigate is shown during 1973 tests. The transducer is part of an all-digital, lightweight, low-cost sonar system that incorporates the most modern acoustic devices, displays and computers.



High-power, traveling-wave tubes like this one produced by Raytheon are key components in phased-array radar systems. One of the world's largest radars will be the phased-array Air Force installation in Alaska. In 1973, Raytheon was named prime contractor on the project.



Red lighting inside a Raytheon test center at Wayland, Mass., simulates shipboard conditions. For many years, the center has been used to test naval fire-control equipment. A major expansion begun in 1973 will provide facilities for testing and demonstrating a much broader range of electronic systems for shipboard use.



The technologies involved have potential application in future commercial-satellite communications systems.

Commercial Electronics

There were notable gains in Raytheon's commercial electronics business during 1973. All components reported sales increases, some achieving significant growth percentagewise. In addition, the product base was substantially expanded, and market penetration improved.

Sales of semiconductor products rose about 80 per cent, reaching an all-time high for the company and reflecting a vigorous upsurge in demand for all types of integrated circuits. Gaining market position, Raytheon moved to establish a reputation as an efficient, highly reliable producer.

During the year, four principal technological advances marked the company's continuing work in medium-scale integration (MSI) and large-scale integration (LSI). These were a monolithic linear integrated circuit for communications switching, a 256-bit random-access memory, a high-performance 60-gate universal array, and an automatically routed hybrid LSI circuit package.

In addition, the company made initial penetration in the automobile market with integrated circuits for anti-skid systems and in the medical market with circuits for heart pacemakers.

Raytheon's advances in microwave technology included development of a new type of high-power avalanche diode that could halve the cost of producing microwave power for certain applications. Such diodes, with their anticipated greater reliability, ultimately could replace traveling-wave tubes in long-haul microwave communications equipment.

Also in 1973, Raytheon's unique heat-transfer module (HTM), developed originally to dissipate microwave-tube heat, achieved its first major industrial application. It was incorporated into cooking-oil heaters for use in Colonel Sanders' Kentucky Fried Chicken stores. The module, a high-efficiency heater that significantly reduces energy consumption, is also used in Amana home heating and cooling systems.

Early in 1974, Raytheon transferred its interest in Abergas – the Welsh company that produces the HTM for European markets – to Valor Industries, which will continue to manufacture and market the HTM under Raytheon license.

A major 1973 development by Machlett Laboratories was a new anode for diagnostic X-ray tubes. Made from a molybdenum alloy,



For destroyers: an extra-long-range radar for air search.

the new product enables Machlett to offer a high-power tube that can handle the exposure rates required for moving-picture X rays and for high-resolution examinations of blood vessels.

In 1973, Raytheon's nuclear scanning products encountered certain field problems, which are now resolved. Production of the new gamma camera was delayed, but prototype models are now being field tested. A release for production is expected in 1974.

Raytheon has developed a unique reflective optics system that can be used to focus several powerful laser beams at one small spot, thus producing a tremendous concentration of energy. Such a system has been supplied to the Atomic Energy Commission for possible use in laser-induced fusion. Successful experimentation could contribute to the long-term solution of the nation's energy problem.

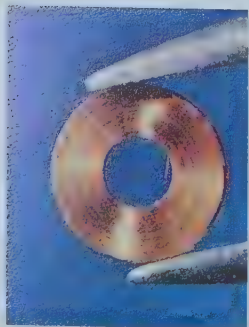
Raytheon Data Systems' business showed significant 1973 progress. Good headway was made in marketing the PTS-100 programmable terminal system. The list of users now includes several major credit bureaus and a dozen airlines around the world. A new software package enables the PTS-100 to qualify for a much wider range of commercial applications.

The RDS-500, a low-priced, general-purpose minicomputer, was introduced in November. The high-speed product is particularly well suited to handling seismic data. It is being incorporated into the Phoenix data-processing system, which is used by Seismograph Service Corporation and leased to customers.

There was a marked increase in sales of electronic equipment to aid in the safe operation of commercial and recreational vessels. The Ray-50 VHF/FM radiotelephone, introduced in 1972, was well received by boatmen during 1973.

Near year's end, Raytheon introduced an improved radar for boats of medium size. Designated the 3100 Mariner's Pathfinder® radar, the new product has a range of up to 32 nautical miles. Also introduced for the 1974 market were the DE-737 Fathometer® depth sounder for shallow-water bottom-tracking; the Ray-1205, a compact, long-range, single-sideband radiotelephone; and the Ray 13-R bridge-to-bridge receiver primarily for commercial vessels navigating rivers and harbors. Whether petroleum shortages will adversely affect 1974 sales to boat owners is not yet apparent.

Sorensen Company, a Raytheon unit with headquarters in Manchester, N.H., added to its line of modular power supplies and achieved a material sales increase.



Tweezers hold 3000-turn thin-wire coil from Lacroix & Kress.



A conveyor moves boxes of frozen meat through the RadarLine™ meat-tempering tunnel at the new plant of Geo. A. Hormel & Co. in Beloit, Wis. Microwave energy in the Raytheon-developed tunnel partially thaws the meat quickly and uniformly for use in Hormel's chili, stew and other processed foods.



An exceptionally popular electronic timepiece is HMW Industries' Pulsar Time Computer – displayed here with circuitry that "makes it tick" without ticking. Semiconductor devices from Raytheon contribute to the reliability of this watch and that of such other exacting applications as hearing aids and heart pacemakers.



Most Raytheon foreign subsidiaries, which market a broad range of electronic components and equipment, posted gains. These were among the year's overseas highlights:

Lacroix & Kress, a West German producer of fine magnet wire, was acquired and became a Raytheon subsidiary. Its products, which complement those of Raytheon-owned Sterling Cable in the United Kingdom, made strong gains in Germany and in export markets.

Sterling Cable – a supplier of wire and cable for electric utility, communications and industrial applications – topped its 1972 results.

Raytheon's minority equity in Selenia, an Italian electronics firm, was sold to Finnmeccanica.

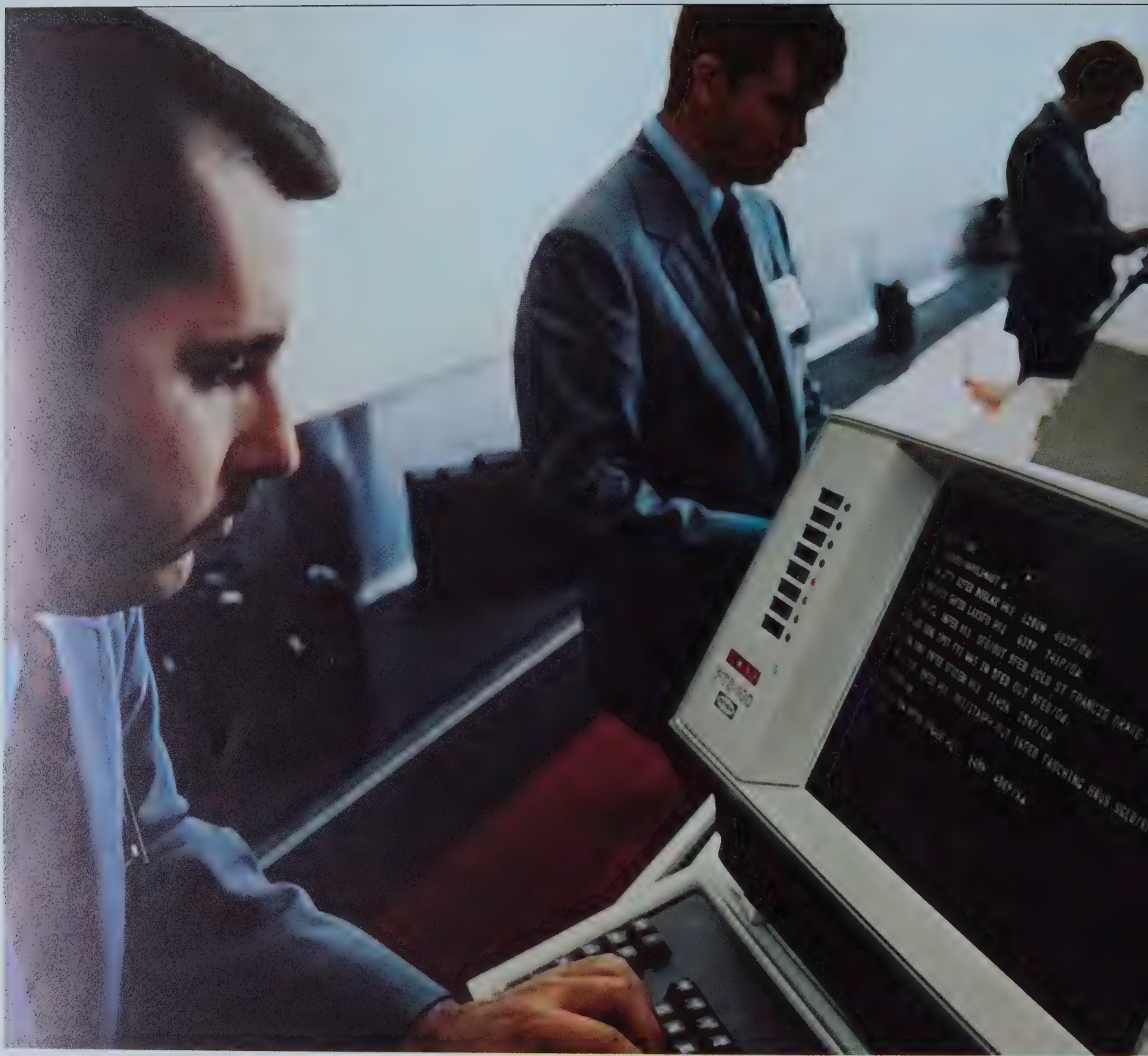
Some 550 visual display systems, produced by Cossor Electronics Limited (United Kingdom) for the Royal Air Force, were delivered and installed in 1973. The order was one of the largest for data displays ever placed in the United Kingdom.

Cossor nevertheless encountered nonrecurrent and operating problems in 1973, primarily because of late receipt of contracts. As this report went to press, some reduction of the workforce was being implemented.

Raytheon Canada contracted to build 13 "thin-line" earth stations for Canada's satellite communications systems. The stations will improve telephone service in northern Canada and permit the addition of radio and TV service as required.

Transistor AG (Switzerland), which manufactures semiconductor products for applications in Europe and the United States, benefited from upsurging demand for its traditional products and for its new planar devices.

Indicator of new "3100"
Raytheon radar helps boat
operators "see" up to 32
miles. Many commercial
and recreational vessels
rely on the company's
electronic navigational
aids. In addition to radars,
the company markets
loran receivers, radiotele-
phones and depth
sounders.



Raytheon's PTS-100 programmable terminal system speeds airline reservations, ticketing, seat selection, and departures. In 1973, several additional U.S. and overseas airlines became PTS-100 users.



Exploration, Engineering and Construction Services

	1973	1972
Net Sales	\$332,200,000	\$364,900,000
Income before Taxes	\$ 17,000,000	\$ 10,700,000

Design and construction of petroleum refineries and petrochemical plants is the business of The Badger Company. Geophysical exploration for oil and natural gas is the principal activity of Seismograph Service Corporation. United Engineers & Constructors is primarily involved in engineering and building nuclear and conventional power plants. All three subsidiaries are benefiting from the mounting demand for new energy sources.

In 1973, the companies' combined backlog rose to a record level. Furthermore, despite a temporary decline in total sales revenue, their combined earnings rose materially.

Badger achieved a sharp turnaround. Its backlog for design, engineering and construction services, which was sparse at the outset of 1973, improved greatly by year end. After a slow start, Badger's recorded sales also gained momentum as the year progressed. Topping the list of contracts won by the company in 1973 are those for two large refineries—one in West Germany and one in the Bahamas. Combined value of the two contracts exceeds \$200 million.

Other major new Badger contracts cover three additional petroleum projects and a dozen chemical and petrochemical facilities. Five of these facilities will be in Taiwan, a promising new market area.

Industry reports indicate that demand for chemicals has now surpassed production capacity in the United States. A new round of expansion is therefore likely. Its magnitude will depend largely on availability of feedstocks. Having a strong position in proprietary chemical processes, Badger expects to participate in further expansions throughout the chemical industry.

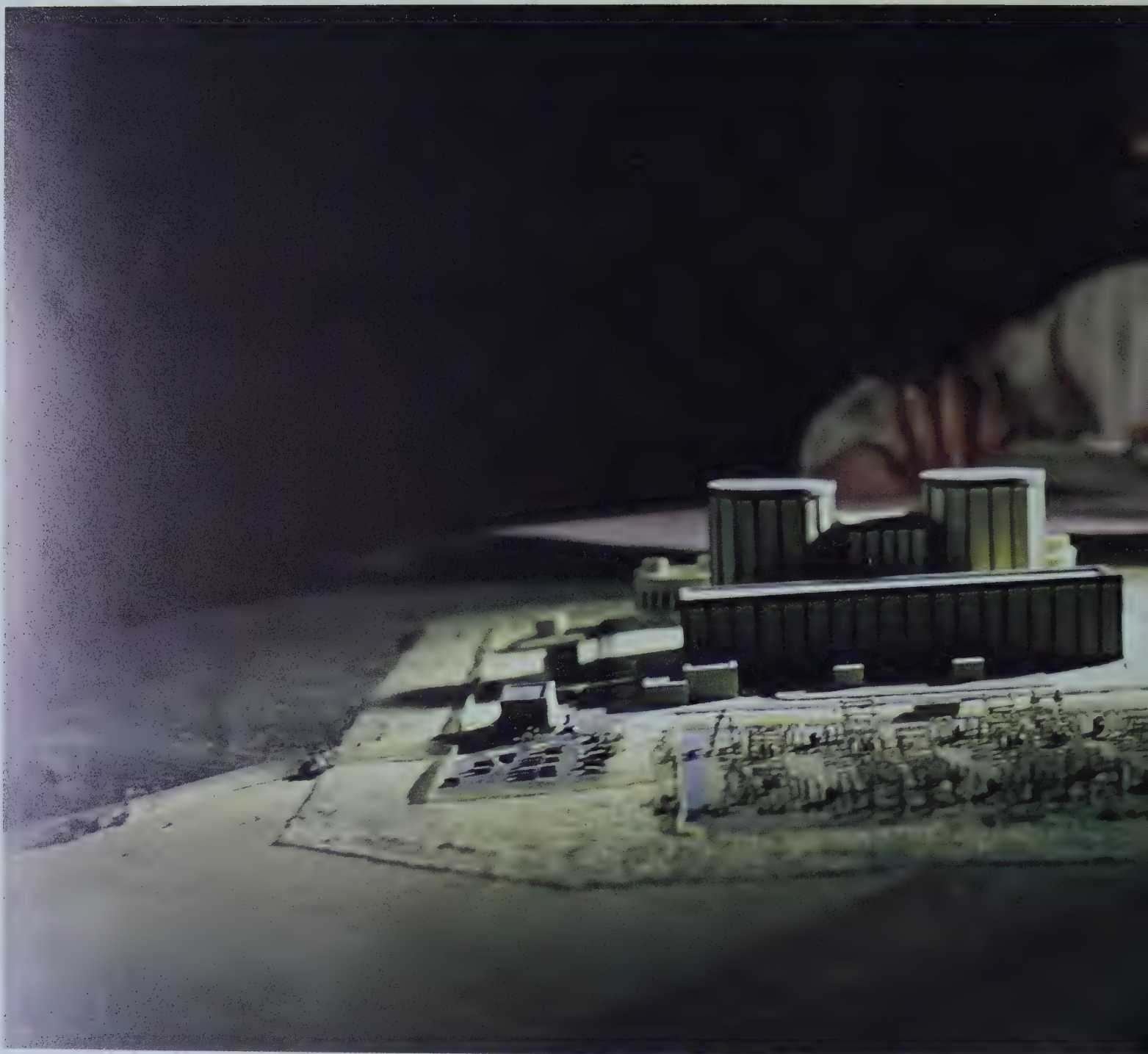
Acceleration of petroleum exploration is creating greater demand for Seismograph's services. In 1973, new centers for processing seismic data were opened, and the number of Phoenix data-processing systems leased to oil companies increased. The number of land and marine crews under contract remained virtually constant.



Off-road vehicles like this vibrator carrier help Seismograph gather geophysical data. In 1973, the Raytheon subsidiary pressed the search for oil and natural gas on six continents and in several offshore locations.



The substitute natural gas plant Badger completed in 1973 for Boston Gas Company is the first of its kind in the United States. The unit operates on propane feedstock. With minor modification, however, it can also run on naphtha. Located in Everett, Mass., the plant will supplement natural gas supplies in periods of peak demand.



United Engineers built this model of the nuclear power plant the company is designing for Delmarva Power & Light. Comprising twin 770-megawatt units, the station will utilize high-temperature, gas-cooled reactors. United will handle the construction.



Areas in which Seismograph crews operated in 1973 ranged from difficult Sahara sands to South American, Far Eastern and North Sea waters. Major contracts were obtained to search for petroleum in Alaska, the last great unexplored U.S. land frontier. Seismograph upgraded its fleet of seismic vessels with a new ship incorporating integrated satellite navigation equipment for precise positioning, 48-trace digital recording equipment, and air-gun energy sources.

Intensive company research leading to an expanded well-logging business continued.

Innovations in the Phoenix system for processing seismic data helped solidify its leadership over competing systems. An advanced processing system will be based on Raytheon's new RDS-500 minicomputer and the Apollo array transform processor. This equipment will enable the new improved Phoenix to have much shorter compute times and greater accuracy.

United had another record year. Sales and backlog achieved all-time highs by ample margins.

In September, a nuclear-fueled generating unit engineered by United was licensed by the Atomic Energy Commission for full-power operation. It was the first such unit engineered by United to achieve this important milestone.

In 1973, United won a contract to design and construct a 2400-megawatt nuclear power plant for New York State Electric & Gas Corporation. United also was selected to construct four nuclear units it had been engaged earlier to engineer – two each for Public Service Company of New Hampshire and Delmarva Power & Light Company. Also, early in 1974, the company received a contract to engineer and design another major nuclear power plant. The total capital cost of these projects is estimated at \$5 billion.

Engineering work progressed in 1973 on the Delmarva nuclear plant that will utilize the new generation of high-temperature, gas-cooled reactors. These units will be among the first of the new type to be installed anywhere.

Also in 1973, United won contracts to design and/or construct a number of major coal- and oil-fired power plants.

In other areas: United received a major engineering assignment for a plant to make intermediates for fiber manufacture, gained entry into the ore-beneficiation field and undertook the installation engineering of what is expected to be the world's most advanced steel bar and rod mill.

Major Appliances

	1973	1972
Net Sales	\$187,900,000	\$156,200,000
Income before Taxes	\$ 14,300,000	\$ 11,900,000

For the second year in a row, Raytheon's two appliance companies showed a 20 per cent growth in both sales and earnings.

Amana, the leading producer of appliances for microwave cooking (a Raytheon discovery), achieved record sales of Radarange® microwave ovens. Despite adverse publicity in *Consumer Reports* magazine pointing to possible radiation hazards in microwave cooking, Amana succeeded in restoring consumer confidence by publicizing its procedures to ensure product safety.

Two small, economy Radarange ovens were prepared for 1974 introduction. Amana can now offer consumer ovens in the full range of prices. Capitalizing on its success in the consumer market, Amana has also designed new commercial versions of the Radarange oven and in 1974 will re-enter the restaurant and vending markets through leasing arrangements.

Also readied for introduction in 1974 was a three-door refrigerator/freezer. The unit features easy-access dispensers for ice and cold water. Both can be reached without opening a door.

Meat shortages helped create heavy demand for Amana freezers during 1973. Early in 1974, freezers were still on allocation.

Although the appliance industry's sales of gas ranges were down in 1973, Caloric Corporation's were up. Electric ranges were introduced to the Caloric line in 1973, and the line was expanded at year end by additional models. In 1974, a total of 36 range models – 12 electric and 24 gas – are offered under Caloric's label.

Sensitive to the energy shortage, both appliance makers are seeking to reduce their products' power consumption. Amana, which installs power-saving devices in many of its appliances, plans early introduction of a refrigerator requiring 60 per cent less power than today's comparable models. Caloric is working on a solid-state ignition system to eliminate the pilot light on gas ranges and thus reduce gas consumption by 25 per cent.



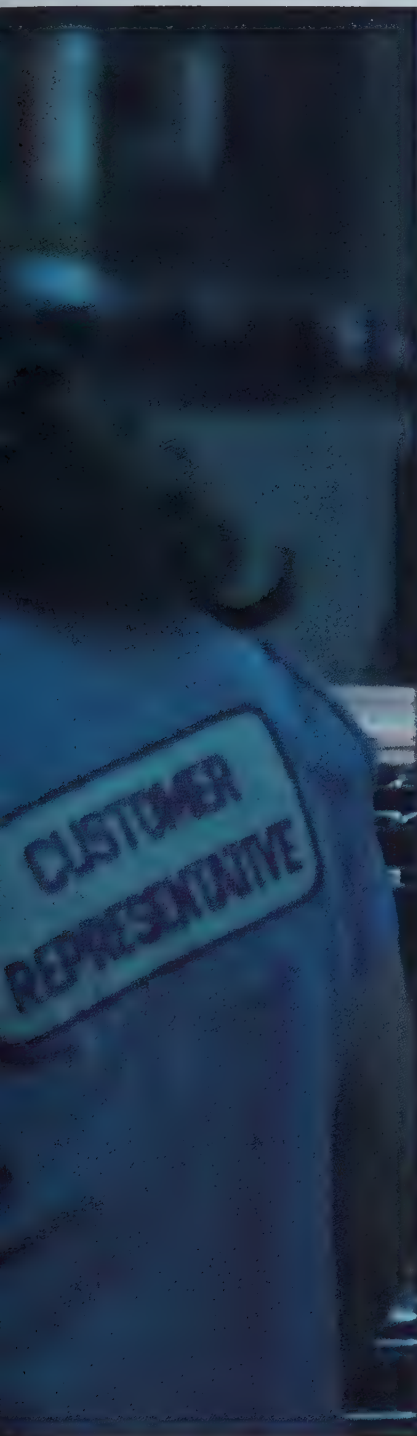
Range buyers find a variety of convenience features in Caloric gas and electric models. This deluxe, self-cleaning gas range has an infrared broiler, timer, rotisserie and automatic meat probe. A special burner can automatically adjust its flame to hold a desired temperature.



Easily accessible dispensers for cold water and ice are among the special features of Amana's newest refrigerator/freezer. The three-door appliance, which was introduced in January 1974, is available in two capacities: 22 and 25 cubic feet.



Amana checks every Radarange® microwave oven to guard against radiation leakage. Careful engineering and thorough testing protect consumers and assure efficient cooking. In 1973, Amana ovens achieved unprecedented popularity.



Other Lines

	1973	1972
Net Sales	\$129,600,000	\$125,000,000
Income before Taxes	\$ 12,100,000	\$ 10,700,000

Raytheon's other principal operations include D.C. Heath and Company, Iowa Manufacturing Company and Raytheon Service Company.

Heath publishes books, learning materials and spoken-word records. Iowa Manufacturing, headquartered in Cedar Rapids, Iowa, specializes in production and sale of equipment used in heavy construction. Raytheon Service Company, based in Burlington, Mass., engages worldwide in diverse services including engineering, installation, maintenance, training, photography, technical writing, and publishing.

Rapid acceptance of new publications and a more aggressive selling effort helped Heath accomplish a 1973 turnaround. The year was the division's best since 1967.

A bestseller on Heath's current list of college books is a 900-page introductory psychology text. It is the joint effort of nine eminent psychologists. The book and supplementary teaching materials already are in use at more than 200 colleges and universities.

In June, Heath completed the first year of a unique three-year cooperative venture with the Washington, D.C., public schools. The project is aimed at increasing the reading and mathematical skills of about 16,000 primary-grade children. By providing teacher training, by supplying quality educational materials and by coordinating parental involvement, Heath helped make the first year of the novel experiment successful.

In a move to concentrate the company's emphasis on educational publishing and away from classroom equipment and apparatus, the MSC Macalaster Company in Nashua, N.H., was sold to Eduquip Inc. of Boston.

Iowa Manufacturing had another good year; its total sales rose 15 per cent. Heavy construction machinery – including asphalt mixing plants, asphalt paving equipment, and rock-crushing and screening equipment – sold well. The order backlog rose comparably.



Heath publications in 1973 included these new books.



Raytheon Service Company is seeking economically feasible ways to recover useful materials from municipal wastes. Such materials, some shown here, include glass, and metallic scraps rich in aluminum, copper, iron and zinc.



Iowa Manufacturing's Cedarapids "Gemini" dual paver system lays a double lane of asphalt on a highway in Japan. The Raytheon subsidiary, like many other units of the company, in 1973 increased its sales beyond U.S. borders.



Iowa, which developed the nation's first hydrostatic asphalt paver in 1967, marketed an improved model in 1973. The new paver has the advantages of increased efficiency, lower maintenance costs and easier operation of hydrostatic drives. Every operation of the "tractor" section is controllable by switches or knobs at the single operator's console.

Other products introduced by the subsidiary in 1973 include three additional models of asphalt mixing plants, and new dust collectors to prevent air pollution by asphalt mixing, crushing and screening operations.

A new building completed in Cedar Rapids gave the company additional space in which to conduct its research and development work.

Raytheon Service Company (RSC) undertook a unique company venture in community service. The subsidiary joined with the City of Lowell (Mass.) in a project to design, build and operate the first full-scale U.S. plant to recover reusable materials from solid waste. Once the plant is operating, 95 per cent of the material now disposed of as landfill is instead expected to produce reusable materials. The program is jointly sponsored by the city, the state and the U.S. Environmental Protection Agency.

In its more traditional role of providing support services to agencies of the U.S. government, RSC in 1973 was awarded a contract for continued support of and expansion of its engineering activities for shipboard combat systems using AN/UYK-7 data processors. Aimed mainly at systems standardization, the assignment embraces technical planning, coordination of hardware and software development, and combat-system design.

Extending its activities with shipbuilders to Argentina, RSC is under contract to the Argentine navy to outfit a hydrographic research ship with electronic equipment for ocean exploration. All necessary engineering services for installation, integration, testing, training and maintenance are to be provided.

RSC continues to train electrical power-plant operators in the United States and teach diesel mechanics in Kenya. The latter program is being expanded so students can learn to perform as instructors, supervisors or highly skilled vehicle-maintenance technicians.

Many of RSC's activities are in support of programs or products for which other units of Raytheon have primary responsibility.



RSC employee (r.) instructs Kenyans in diesel mechanics.

Financial Review – 1973

Worldwide Consolidated Net Sales in 1973 were a record \$1.590 billion. This is an increase of \$125 million or 8.6% over the \$1.465 billion sales in 1972. Of the total sales volume, 48% was for U.S. Government end use and 20% to customers outside the United States.

Income reached a record \$46.2 million, an increase of 12.1% over operating earnings in 1972 of \$41.2 million before an extraordinary charge of \$3,275,000. The 1973 return on sales of 2.9% compared favorably with the 2.8% return on sales in 1972.

Earnings Per Common Share in 1973 were \$3.03 compared with \$2.59 per share in 1972 before the extraordinary item. Earnings per common share were calculated on the basis of 15,217,912 average shares outstanding in 1973; 15,898,052 average shares outstanding in 1972.

Dividends of \$10.2 million payable quarterly in cash were declared during 1973. The annual dividend rate was increased from \$.60 to \$.70 per share effective with the dividend declared on June 20, 1973. The dividends declared in 1973 equalled approximately 22% of consolidated net income.

Common Shares Outstanding decreased by approximately 593,000 during the year. The company purchased 625,900 shares at an average cost of \$26.26 during 1973; key employees purchased approximately 33,000 shares under the provisions of the Company Stock Option Plan.

Total Stockholders' Equity increased by \$20.1 million to \$356.1 million. The increase was attributable to earnings of \$46.2 million and the exercise of employee stock options of \$.6 million offset by dividends of \$10.2 million and company purchases of stock of \$16.5 million. The year-end book value per outstanding common share increased 10.2% from \$21.59 in 1972 to \$23.79 in 1973. Return on average stockholders' equity increased to 13.4% in 1973 from 12.3% in 1972 before the extraordinary charge.

Debt increased \$12.3 million from \$115.9 million at the end of 1972 to \$128.2 million at December 31, 1973. The company continues to issue commercial paper and maintains bank credit lines to finance its short-term borrowing requirements.

Backlog of the company at the end of 1973 was \$1.421 billion, a 40.9% increase over the \$1.009 billion backlog at year-end 1972. Funded U.S. Government backlog increased 20.5% from \$542 million at the end of 1972 to \$653 million at December 31, 1973.

Wages and Salaries paid to employees were \$586.9 million in 1973 compared with \$528.6 million in 1972. Total employment increased to 51,081 at the end of 1973 from 48,338 at the end of 1972.

Improved compensation and benefit programs have been implemented for the company's employees; and agreements with labor unions covering various bargaining units throughout the country were negotiated without any work stoppages.

Plant and Equipment (net) increased by \$12.4 million in 1973. The growth was attributable to capital expenditures of \$41.0 million, and the acquisition of \$3.6 million of the net plant and equipment of Lacroix & Kress, partially offset by depreciation of \$29.8 million and disposals of \$2.4 million.

Research and Development expenditures for company-sponsored projects increased to \$35.5 million in 1973 from \$30.6 million in 1972. These were in addition to significant amounts of Government funded research and development expended on U.S. Government contracts.

Pension Expense charged to operations in 1973 for all plans was \$12.2 million. The company charges all current costs of pensions to operations as well as regular planned amounts for prior service where such liability exists. Pension funds of all plans affecting the United States and Canadian companies are managed by independent trustees.

Lacroix & Kress, a West German manufacturer of magnet wires, was purchased by the company in 1973. Lacroix & Kress's products have many applications in the electrical and electronics fields, both for industrial and commercial products.

Sales and Income by Business Lines

	(Dollars in Millions)				
	1973	1972	1971	1970	1969
Net Sales					
Electronics	\$ 940.8	\$ 818.9	\$ 748.9	\$ 784.5	\$ 831.8
Exploration, Engineering and Construction Services ..	332.2	364.9	345.9	287.0	263.4
Major Appliances	187.9	156.2	126.8	107.4	100.8
Other Lines	<u>129.6</u>	<u>125.0</u>	<u>125.5</u>	<u>119.5</u>	<u>136.0</u>
Total	\$1,590.5	\$1,465.0	\$1,347.1	\$1,298.4	\$1,332.0
Income Before Taxes and Extraordinary Items					
Electronics	\$42.2	\$40.3	\$33.9	\$42.3	\$49.9
Exploration, Engineering and Construction Services ..	17.0	10.7	15.0	10.0	10.4
Major Appliances	14.3	11.9	8.8	7.0	6.0
Other Lines	<u>12.1</u>	<u>10.7</u>	<u>12.8</u>	<u>10.9</u>	<u>10.7</u>
Total	\$85.6	\$73.6	\$70.5	\$70.2	\$77.0

Balance Sheets

Raytheon Company and Consolidated Subsidiaries

Assets

	December 31, 1973	December 31, 1972
Current assets		
Cash and temporary investments	\$ 22,405,975	\$ 27,228,647
Accounts receivable, less allowance for doubtful accounts: 1973 - \$4,229,706; 1972 - \$3,146,649 (note C)	140,974,904	121,458,234
Contracts in process (notes A and C)	175,551,837	163,781,688
Inventories (notes A and D)	167,678,052	132,176,524
Prepaid expenses	<u>6,157,454</u>	<u>4,626,668</u>
Total current assets	512,768,222	449,271,761
 Long-term receivables (note E)	 20,883,111	 24,451,793
 Investments (note A)		
Affiliated companies	2,557,220	2,248,230
Other	2,637,107	5,853,791
 Property, plant and equipment, net (notes A and F)	 148,579,861	 136,180,396
 Deferred charges and other assets	 <u>18,376,691</u>	 <u>13,122,973</u>
	<u><u>\$705,802,212</u></u>	<u><u>\$631,128,944</u></u>

The accompanying notes are an integral part of the financial statements.

Liabilities and Stockholders' Equity

	December 31, 1973	December 31, 1972
Current liabilities		
Notes payable (note G):		
Banks	\$ 37,292,726	\$ 13,452,151
Other, principally commercial paper	3,737,068	17,509,813
Current maturity of long-term debt (note H)	3,208,710	3,008,670
Advance payments, less contracts in process:		
1973 - \$139,438,147; 1972 - \$89,281,982	18,249,364	25,126,795
Accounts payable	87,610,837	64,274,650
Accrued salaries, wages and commissions	39,330,589	33,381,132
Federal and foreign income taxes (notes A and I)	21,599,607	10,453,441
Other accrued expenses	54,632,652	46,014,609
Total current liabilities	265,661,553	213,221,261
 Long-term debt (note H)	 84,002,631	 81,894,508
 Commitments and contingent liabilities (note J)		
 Stockholders' equity		
Common stock, par value \$2.50 per share:		
Authorized 30,000,000 shares		
Outstanding: 1973 - 14,971,613 shares; 1972 - 15,564,578 shares		
(after deducting shares in treasury: 1973 - 2,229,594 shares; 1972 -		
1,635,063 shares) (notes K and L)	37,429,033	38,911,445
Capital in excess of par value (note M)	64,376,917	66,242,837
Earnings reinvested in the business (note H)	254,332,078	230,858,893
Total stockholders' equity	356,138,028	336,013,175
	<u>\$705,802,212</u>	<u>\$631,128,944</u>

Statements of Income and Earnings Reinvested in the Business

Raytheon Company and Consolidated Subsidiaries

	Year Ended December 31, 1973	Year Ended December 31, 1972
Net sales (note A)	\$1,590,460,804	\$1,465,030,556
Cost of sales	1,322,302,347	1,233,982,002
Administrative and selling expenses	146,960,617	127,069,785
Research and development expenses (note A)	35,453,214	30,569,762
Interest expense, less interest income:		
1973 – \$4,580,700; 1972 – \$3,564,765	6,266,163	5,474,302
Other (income) expense – net	(6,119,640)	(5,708,798)
	<u>1,504,862,701</u>	<u>1,391,387,053</u>
	85,598,103	73,643,503
Federal and foreign income taxes (notes A and I)	<u>39,436,000</u>	<u>32,470,000</u>
Income before extraordinary item	46,162,103	41,173,503
Extraordinary item:		
Provision for loss (after tax benefit of \$3,025,000) related to settlement of litigation and other expenses associated with the withdrawal from the hospital information systems market	<u>—</u>	<u>3,275,000</u>
Net income	46,162,103	37,898,503
Earnings reinvested in the business at beginning of period	<u>230,858,893</u>	<u>221,163,900</u>
	<u>277,020,996</u>	<u>259,062,403</u>
Dividends declared:		
Common (1973 – \$.675 per share; 1972 – \$.60 per share)	10,199,408	9,584,068
Pooled company, prior to acquisition	—	114,157
Excess of cost over the par value of reacquired common shares less amount allocated to capital in excess of par value	<u>12,489,510</u>	<u>18,505,285</u>
	<u>22,688,918</u>	<u>28,203,510</u>
Earnings reinvested in the business at end of period	<u>\$ 254,332,078</u>	<u>\$ 230,858,893</u>
Earnings per common share (note A):		
Income before extraordinary item	\$3.03	\$2.59
Extraordinary item	—	(.21)
Net income	<u>\$3.03</u>	<u>\$2.38</u>

Statements of Changes in Financial Position

Raytheon Company and Consolidated Subsidiaries

	Year Ended December 31, 1973	Year Ended December 31, 1972
Resources provided:		
Income before extraordinary item	\$46,162,103	\$41,173,503
Depreciation and amortization of property, plant and equipment	29,839,408	28,343,901
Working capital provided from operations exclusive of extraordinary item	76,001,511	69,517,404
Disposal of property, plant and equipment	2,370,550	1,991,985
Decrease in long-term receivables	3,568,682	283,384
Decrease in investments	2,907,694	162,951
Decrease in deferred charges and other assets	1,725,026	1,188,970
Increase (decrease) in long-term debt	1,478,890	(3,711,845)
Sale of common stock under option plans	601,118	2,698,210
Total resources provided	<u>88,653,471</u>	<u>72,131,059</u>
Resources applied:		
Additions to property, plant and equipment	41,024,365	32,351,066
Common shares reacquired	16,438,960	22,540,631
Dividends declared	10,199,408	9,698,225
Acquired company, at date of acquisition:		
Working capital	1,403,066	—
Property, plant and equipment	3,585,058	—
Deferred charges and other assets	2,476,358	—
Excess cost over net assets acquired	4,502,386	—
Long-term debt	(629,233)	—
Conversion of Series A preferred stock:		
Decrease in preferred stock	—	2,321,822
(Increase) in common stock	—	(2,321,822)
Redemption of Series A preferred stock for cash	—	100,432
Working capital applied to extraordinary item	—	3,275,000
Total resources applied	<u>79,000,368</u>	<u>67,965,354</u>
Increase in working capital	<u>\$ 9,653,103</u>	<u>\$ 4,165,705</u>
Analysis of changes in working capital:		
(Decrease) in cash and temporary investments	\$ (4,995,087)	\$(18,167,188)
Increase in accounts receivable	18,192,365	14,858,441
Increase (decrease) in contracts in process	11,770,149	(21,215,682)
Increase in inventories	33,404,996	772,648
Increase (decrease) in prepaid expenses	1,521,297	(456,141)
(Increase) decrease in short-term debt	(10,091,488)	26,453,674
(Increase) decrease in advance payments	6,877,431	(4,216,877)
(Increase) decrease in accounts payable	(22,776,293)	1,054,640
(Increase) in accrued salaries, wages and commissions	(5,949,457)	(2,851,531)
(Increase) decrease in Federal and foreign income taxes	(11,146,166)	11,694,291
(Increase) in other accrued expenses	(7,154,644)	(3,760,570)
Increase in working capital	<u>\$9,653,103</u>	<u>\$ 4,165,705</u>

The accompanying notes are an integral part of the financial statements.

Note A: Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of the parent company and domestic and foreign subsidiaries which are included on the basis of years ending in November or December.

Contracts in Process

Sales under long-term contracts are recorded under the percentage of completion method wherein costs and estimated gross margin are recorded as sales as the work is performed. Estimated gross margin provides for the recovery of allocable research, development, marketing (including bid proposal), selling and administration costs. Accrued income is based on that percentage of estimated total income that incurred costs to date bear to total estimated costs after giving effect to the most recent estimates of cost and funding at completion. On certain contracts, increased funding has been assumed based on expected adjustments of contract prices for increased scope and other changes ordered by the customer. Some contracts contain incentive provisions based upon performance in relation to established targets to which applicable recognition has been given in the contract estimates. Since many contracts extend over a long period of time, revisions in cost and funding estimates during the progress of work have the effect of adjusting earnings in the current period applicable to performance in prior periods. When the current contract estimate indicates a loss, provision is made for the total anticipated loss. In accordance with these practices, contracts in process are stated at cost plus estimated profit but not in excess of realizable value.

Inventories

Inventories are stated at cost (first-in, first-out or average basis) but not in excess of net realizable value.

Investments

Investments in affiliated companies represent ownership of 20% to 50% of such companies and are accounted for under the equity method. Accordingly, the company's share of their earnings and the income taxes, if any, related to repatriating such earnings are included in the accounts. Other investments which represent ownership of less than 20% are stated at cost.

Property, Plant and Equipment

Property, plant and equipment is stated at cost.

Provisions for depreciation are computed generally on the sum-of-the-years digits method, except for certain subsidiaries which use the straight-line or declining balance method. Useful lives, on which depreciation provisions are based, approximate U.S. Treasury guidelines. Leasehold improvements are amortized over the lesser of the life of the lease or the estimated useful life of the improvement.

Federal and Foreign Income Taxes

The company and its domestic subsidiaries record provision for federal income taxes on pretax accounting income at rates in effect under existing tax law, less investment tax credits recorded on a flow-through basis and other tax credits. Foreign subsidiaries have recorded provision for income taxes at applicable foreign tax rates in a similar manner. In addition, the company provides for federal and foreign taxes on undistributed earnings of foreign subsidiaries in excess of requirements for their future operations.

Research and Development Expenses

Research and development expenditures for company-sponsored projects are expensed as incurred.

Pension Costs

The company and its subsidiaries have several pension and retirement plans covering substantially all employees, including certain employees in foreign countries.

Annual charges to income are made for costs of the plans including current service costs and interest on and amortization of prior service costs over periods from ten to thirty years. It is the company's policy to fund pension costs accrued.

Translation of Foreign Currencies

Net assets of the foreign subsidiaries are translated into United States dollars at the applicable rates of exchange in effect at December 31 in each year, except that inventories and property, plant and equipment are translated at historical rates. Income accounts are translated, generally, at the year's average rates of exchange, except for depreciation and cost of sales which are translated at the rates of the related assets. Exchange gains and losses are included in consolidated net income.

Earnings per Common Share

Earnings per common share are based upon the weighted average number of common shares outstanding during each year. Shares contingently issuable in connection with acquisition agreements are anti-dilutive.

Note B: Acquisitions

The company acquired Lacroix & Kress, a West German producer of fine magnet wires, in January 1973. The acquisition has been accounted for as a purchase and, accordingly, the operations of Lacroix & Kress are included since date of acquisition. The excess of cost over net assets acquired is being amortized to income on the straight-line method over forty years. The accounts of Lacroix & Kress were not material with respect to the 1972 financial statements.

Note C: Contracts in Process

Contracts in process consist of the following at December 31:

	1973			1972		
	Cost Type	Fixed Price Type	Total	Cost Type	Fixed Price Type	Total
U.S. Government end use contracts:						
Billed	\$11,341,523	\$ 12,050,028	\$ 23,391,551	\$13,223,908	\$ 17,478,592	\$ 30,702,500
Unbilled	17,233,635	293,781,385	311,015,020	13,098,721	250,529,071	263,627,792
Less progress payments	—	202,947,735	202,947,735	—	170,335,187	170,335,187
Total	<u>28,575,158</u>	<u>102,883,678</u>	<u>131,458,836</u>	<u>26,322,629</u>	<u>97,672,476</u>	<u>123,995,105</u>
Other customers:						
Billed	14,840,628	7,765,660	22,606,288	10,394,324	11,124,659	21,518,983
Unbilled	10,419,986	203,994,435	214,414,421	6,361,653	151,454,902	157,816,555
Less progress payments	—	192,927,708	192,927,708	—	139,548,955	139,548,955
Total	<u>25,260,614</u>	<u>18,832,387</u>	<u>44,093,001</u>	<u>16,755,977</u>	<u>23,030,606</u>	<u>39,786,583</u>
	<u>\$53,835,772</u>	<u>\$121,716,065</u>	<u>\$175,551,837</u>	<u>\$43,078,606</u>	<u>\$120,703,082</u>	<u>\$163,781,688</u>

Accounts receivable and contracts in process in 1972 have been restated to conform in presentation to 1973.

The U.S. Government has a security title in unbilled contracts associated with those contracts which provide for progress payments.

Note D: Inventories

Inventories consist of the following at December 31:

	1973	1972
Finished goods	\$ 48,580,253	\$ 44,189,521
Work in process	76,065,950	57,537,154
Materials and purchased parts	52,515,144	36,921,367
	<u>177,161,347</u>	<u>138,648,042</u>
Less progress payments	9,483,295	6,471,518
	<u>\$167,678,052</u>	<u>\$132,176,524</u>

Note E: Long-Term Receivables

Long-term receivables consist of the following at December 31, 1973:

Customers, due in installments to 1979, with interest principally in the range of 5½ % to 9%	\$14,718,953
Others, principally due in 1979, with interest up to 7¼ %	6,164,158
	<u>\$20,883,111</u>

Note F: Property, Plant and Equipment

Property, plant and equipment consists of the following at December 31:

	1973	1972
Land	\$ 6,255,549	\$ 5,406,219
Buildings and leasehold improvements	102,260,595	93,316,499
Machinery and equipment	248,563,791	223,227,525
	<u>357,079,935</u>	<u>321,950,243</u>
Less accumulated depreciation and amortization	208,500,074	185,769,847
	<u>\$148,579,861</u>	<u>\$136,180,396</u>

Note G: Notes Payable

The company maintains domestic credit lines with a group of banks totaling \$70,000,000 which are unused at December 31, 1973. The credit lines provide for interest at the prime rate in effect at each bank. Compensating balance arrangements are of an informal nature, with the understanding that a balance will be maintained averaging 10% of the total lines of credit available plus an additional 10% of the average amount borrowed under such lines. The balances so maintained during 1973 were generated by float, thus resulting in no effective impact on the cost of borrowings or cash balance.

The company has a special financing arrangement with a bank to finance a foreign sales contract on which \$15,274,000 is outstanding at December 31, 1973. In addition, the company, from time to time, issues its short-term commercial paper which amounted to \$3,500,000 at December 31, 1973.

Domestic and foreign subsidiaries maintain credit lines or commitments approximating \$41,000,000 of which \$22,018,726 was utilized at December 31, 1973. Compensating balance arrangements of such subsidiaries are not significant.

The maximum amount of short-term borrowings, domestic and foreign, at any month-end during the year was \$60,500,000. The approximate average aggregate borrowings outstanding during the year were \$41,300,000. The approximate weighted average interest was 10.4%. Both averages were computed based upon each loan and the period during which it was outstanding. The average interest rate in effect at year-end approximated the prime rate.

Note H: Long-Term Debt

Long-term debt consists of the following at December 31, 1973:

8¼ % Sinking Fund Debentures, due 1996	\$50,000,000
5½ % notes payable \$1,000,000 semiannually with balance payable December 1, 1981	21,000,000
Foreign note payable in 1976, variable rate, 11 % at December 31, 1973	6,480,000
8 % foreign note payable in 1979	4,560,000
Other notes (including \$1,816,409 of mortgage notes) in the range of 2½ % to 6 %, payable in installments, maturing at various dates from 1976 to 1982	5,171,341
	<u>87,211,341</u>
Less amounts maturing during 1974	3,208,710
	<u>\$84,002,631</u>

The aggregate amounts of indebtedness maturing in each of the succeeding four years are: 1975 – \$3,236,909; 1976 – \$9,410,235; 1977 – \$2,557,531; 1978 – \$2,290,670.

The indenture for the 8¼ % Sinking Fund Debentures provides that the company will make annual sinking fund payments of \$3,300,000 prior to July 1 in each of the years 1982 through 1995 and may at its option increase any sinking fund payment by an additional \$3,300,000 in each of said years. The Debentures may be redeemed at the option of the company, as a whole or in part, at any time, at prices decreasing from 106.98 % of face value currently to 100 % in 1991 and thereafter, except that until 1981, borrowed funds used for this purpose must bear a higher interest rate.

Under the agreement covering the 5½ % notes due through 1981, \$162,996,278 of earnings reinvested in the business at December 31, 1973, is unrestricted with respect to cash dividends on common stock.

Note I: Federal and Foreign Income Taxes

Income reported for federal and foreign tax purposes differs from pretax accounting income due to various requirements of internal revenue codes and the company's accounting practices. Timing differences are attributable principally to practices applied to long-term fixed price contracts, fees on cost type contracts, undistributed earnings of foreign subsidiaries, warranty reserves, promotional expenses, pension costs, compensation costs and inventory reserves. The differences are not fully determined until after the reporting of the results for the year. The net credit balance of deferred taxes included in the balance sheet caption "Federal and foreign income taxes" was estimated to be \$6,200,000 at December 31, 1973.

The provision for federal and foreign income taxes consists of the following for the year ended December 31, 1973:

Current income tax expense:	
Federal	\$36,396,000
Foreign	3,940,000
Deferred income tax expense	(900,000)
	<u>\$39,436,000</u>

Investment tax credits amounted to \$1,272,573 and \$1,142,090 in 1973 and 1972, respectively.

The amount of undistributed earnings of foreign subsidiaries at December 31, 1973, deemed necessary for their future operations, for which federal income and foreign withholding taxes have not been provided, was approximately \$9,200,000. This is exclusive of amounts which would result in little or no additional tax if remitted.

Note J: Commitments and Contingent Liabilities

At December 31, 1973, the company had commitments under long-term operating leases requiring approximate annual rentals on a net lease basis as follows: 1974 – \$7,689,000; 1975 – \$8,154,000; 1976 – \$7,261,000; 1977 – \$5,712,000; 1978 – \$4,675,000; 1979 through 1983 – \$18,214,000; 1984 through 1988 – \$15,922,000; 1989 through 1993 – \$14,704,000; thereafter – \$21,337,000. The commitments under long-term non-capitalized financing leases requiring approximate annual rentals on a net lease basis were as follows: 1974 – \$4,578,000; 1975 – \$4,403,000; 1976 – \$3,971,000; 1977 – \$3,529,000; 1978 – \$3,389,000; 1979 through 1983 – \$15,399,000; 1984 through 1988 – \$10,447,000; 1989 through 1993 – \$7,688,000; thereafter – \$4,639,000. The present value of non-capitalized financing lease commitments approximated \$30,442,000 for real estate and \$4,866,000 for equipment. The weighted average interest rate of 6.96 % utilized in the calculation of present values is based upon the terms of the applicable leases and their interest rates which range from 5 % to 8 %. There would be no material impact upon net income if all non-capitalized financing leases were capitalized. Rental expense for 1973 and 1972, respectively, amounted to \$25,770,928 and \$24,936,506, including \$4,917,156 and \$5,228,288 for non-capitalized financing leases.

Various claims, generally incidental to the conduct of normal business, are pending or threatened against the company from time to time. Ultimate liability, if any, is presently indeterminable and, in the opinion of the management, should have no material adverse effect on the financial condition of the company.

Note K: Capital Stock

Changes during the year ended December 31, 1973, in common stock were as follows:

	Shares	Par Value
Balance at beginning of year	15,564,578	\$38,911,445
Shares sold to officers and employees under stock option plans	32,935	82,338
Shares reacquired	(625,900)	(1,564,750)
Balance at end of year	<u>14,971,613</u>	<u>\$37,429,033</u>

At December 31, 1973, the following shares of common stock (including shares held in treasury) were reserved:

For stock options (note L)	815,096
For contingent issuance of shares in the acquisitions of P.E.D., Inc. and Caedmon Records, Inc.	93,277
	<u>908,373</u>

There were 3,000,000 shares of serial preferred stock without par value authorized and unissued at December 31, 1973.

Note L: Stock Options

During 1973, options to purchase 214,000 shares of common stock under the 1968 and 1973 Qualified Stock Option Plans were granted to officers and employees at prices equivalent to 100% of the fair market value on the date of grant. Options for 32,935 shares were exercised at prices ranging from \$17.81 to \$33.13 per share, and options for 251,320 shares expired.

At December 31, 1973, options to purchase 532,151 shares of common stock were outstanding at prices ranging from \$17.81 to \$47.00 of which options for 255,168 shares were exercisable. All outstanding options expire at various dates through December 26, 1978.

At the 1973 Annual Meeting, the stockholders approved the 1973 Qualified Stock Option Plan and the reservation of 200,000 additional shares of common stock.

Note M: Capital in Excess of Par Value

Changes during the year ended December 31, 1973, in capital in excess of par value were as follows:

Balance at beginning of year	\$66,242,837
Excess of proceeds over the par value of common stock issued on exercise of common stock options	518,780
Excess of cost over the par value of re-acquired common shares less amount allocated to earnings reinvested in the business	(2,384,700)
Balance at end of year	<u>\$64,376,917</u>

Note N: Pension Costs

Total pension expense charged to income was \$12,154,708 and \$10,435,020 in 1973 and 1972, respectively.

Unfunded prior service costs approximated \$69,875,000 at December 31, 1973, of which \$3,220,809 was accrued at that date. The amounts funded and accrued exceeded the actuarially computed value of vested benefits at December 31, 1973, for all plans except four wherein excess vested benefits amounted to \$30,401,000.

Effective in 1973, certain plans were amended to provide increases in retirement benefits, acceleration of compulsory retirement age, earlier vesting of benefits and revisions to certain actuarial assumptions. These changes accounted for most of the increased pension costs and related data in 1973.

Note O: Foreign Operations

The net assets, net sales and net income of foreign subsidiaries were:

	1973	1972
Net assets	\$ 43,353,429	\$ 37,442,847
Net sales	\$238,921,556	\$283,240,853
Net income	\$ 7,247,101	\$ 7,826,563

Consolidated net income in 1973 and 1972 includes net exchange gains of approximately \$1,070,000 and net exchange losses of approximately \$170,000, respectively. There are no significant restrictions which prohibit or restrict the repatriation of funds.

Auditor's Report

To the Board of Directors and Stockholders
Raytheon Company
Lexington, Massachusetts

We have examined the balance sheet of Raytheon Company and consolidated subsidiaries at December 31, 1973 and the related statements of income and earnings reinvested in the business and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We previously examined and reported upon the financial statements for the year 1972.

In our opinion, the aforementioned financial statements present fairly the financial position of Raytheon Company and consolidated subsidiaries at December 31, 1973 and 1972, and the results of their operations and changes in financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Coopers + Lybrand

Boston, Massachusetts
January 22, 1974

Stock Transfer Agents

Morgan Guaranty Trust Company of New York
New York, New York 10007

Harris Trust and Savings Bank
Chicago, Illinois 60690

Bank of America NT & SA
San Francisco, California 94120

The First National Bank of Boston
Boston, Massachusetts 02110

Stock Registrars

Manufacturers Hanover Trust Company
New York, New York 10015

Continental Illinois National Bank
and Trust Company of Chicago
Chicago, Illinois 60690

United California Bank
San Francisco, California 94120

The National Shawmut Bank of Boston
Boston, Massachusetts 02106

Statistical Summary

Raytheon Company and Consolidated Subsidiaries

(Dollars in Thousands Except Per Share Statistics)

1973

Operating Results (as originally reported)

Net sales	\$1,590,461
Income before taxes	\$ 85,598
Income before extraordinary items	\$ 46,162
Income after extraordinary items	\$ 46,162
Earnings per common share: (1)	
Outstanding shares – before extraordinary items	\$3.03
– after extraordinary items	\$3.03
Fully diluted – before extraordinary items	\$3.02
– after extraordinary items	\$3.02
Income before extraordinary items as % of sales	2.9%
Income before extraordinary items as % of average total stockholders' equity	13.4%

Operating Results (restated to include poolings of interests)

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Income before taxes	\$ 85,598
Income before extraordinary items	\$ 46,162
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Earnings per common share: (1)	
Outstanding shares – before extraordinary items	\$3.03
– after extraordinary items	\$3.03
Fully diluted – before extraordinary items	\$3.02
– after extraordinary items	\$3.02
Income before extraordinary items as % of sales	2.9%
Income before extraordinary items as % of average total stockholders' equity	13.4%

Financial Position at Year End (as originally reported)

Assets:		
Current	\$ 512,768	
Property, plant and equipment (net)	\$ 148,580	
Total (including other noncurrent)	\$ 705,802	
Working Capital:		
Net working capital	\$ 247,107	
Ratio of current assets to current liabilities	1.93	
Financial Structure:		
Total debt	\$ 128,241	
Common stockholders' equity	\$ 356,138	
Common stockholders' equity per share (2)	\$ 23.79	
Debt to equity ratio	.36	

General Statistics (as originally reported)

Total backlog	\$1,421,112
Funded backlog of U.S. Government orders included above	\$ 653,256
Number of employees	51,081
Research and development (company-sponsored)	\$ 35,453
Depreciation and amortization on property, plant and equipment	\$ 29,839
Additions and replacements in property, plant and equipment	\$ 41,024
Dividends paid: Common stock cash dividends	\$ 9,914
Preferred stock cash dividends	—
Shares outstanding (after deducting shares in treasury):	
Common	14,971,613
Preferred	—

Notes:

(1) Earnings per share data: outstanding shares computed on average number of shares with earnings reduced by preferred stock dividend requirements; fully diluted assumes conversion of preferred stock and exercise of dilutive stock options.

(2) Assuming full conversion of outstanding Series A preferred stock where applicable.

1972	1971	1970	1969	1968	1967	1966
\$1,465,031	\$1,307,802	\$1,258,743	\$1,285,134	\$1,157,963	\$1,106,049	\$708,993
\$ 73,644	\$ 64,460	\$ 65,133	\$ 69,562	\$ 59,960	\$ 54,405	\$ 36,478
\$ 41,174	\$ 35,185	\$ 34,343	\$ 35,232	\$ 30,845	\$ 28,602	\$ 18,443
\$ 37,899	\$ 35,185	\$ 30,943	\$ 35,232	\$ 29,569	\$ 28,602	\$ 18,443
\$2.59	\$2.43	\$2.32	\$2.35	\$2.10	\$1.98	\$1.45
\$2.38	\$2.43	\$2.08	\$2.35	\$2.01	\$1.98	\$1.45
\$2.58	\$2.32	\$2.22	\$2.24	\$2.02	\$1.90	\$1.43
\$2.37	\$2.32	\$2.00	\$2.24	\$1.94	\$1.90	\$1.43
2.8%	2.7%	2.7%	2.7%	2.7%	2.6%	2.6%
12.3%	12.6%	13.1%	14.3%	14.4%	15.1%	11.9%
\$1,465,031	\$1,347,138	\$1,298,406	\$1,331,961	\$1,235,557	\$1,188,090	\$960,879
\$ 73,644	\$ 70,536	\$ 70,209	\$ 76,982	\$ 68,504	\$ 61,846	\$ 51,113
\$ 41,174	\$ 38,408	\$ 36,964	\$ 38,811	\$ 34,876	\$ 32,931	\$ 25,737
\$ 37,899	\$ 38,408	\$ 33,564	\$ 38,811	\$ 33,600	\$ 32,931	\$ 25,737
\$2.59	\$2.48	\$2.34	\$2.41	\$2.17	\$2.07	\$1.61
\$2.38	\$2.48	\$2.11	\$2.41	\$2.09	\$2.07	\$1.61
\$2.58	\$2.37	\$2.24	\$2.31	\$2.08	\$1.97	\$1.56
\$2.37	\$2.37	\$2.03	\$2.31	\$2.00	\$1.97	\$1.56
2.8%	2.9%	2.8%	2.9%	2.8%	2.8%	2.7%
12.3%	12.3%	12.5%	13.9%	13.9%	13.9%	12.7%
\$ 449,272	\$ 442,316	\$ 405,676	\$ 403,592	\$ 361,151	\$ 364,492	\$301,429
\$ 136,180	\$ 128,686	\$ 133,165	\$ 116,348	\$ 91,087	\$ 78,255	\$ 63,949
\$ 631,129	\$ 612,535	\$ 577,286	\$ 538,836	\$ 465,666	\$ 460,045	\$381,970
\$ 236,051	\$ 207,825	\$ 130,124	\$ 158,012	\$ 160,391	\$ 148,042	\$122,880
2.11	1.89	1.47	1.64	1.80	1.68	1.69
\$ 115,865	\$ 146,031	\$ 156,557	\$ 116,221	\$ 116,568	\$ 155,143	\$140,440
\$ 336,013	\$ 292,438	\$ 265,441	\$ 259,825	\$ 225,652	\$ 200,948	\$161,042
\$ 21.59	\$ 19.41	\$ 17.69	\$ 16.57	\$ 14.93	\$ 13.48	\$ 12.48
.34	.50	.59	.45	.52	.77	.87
\$1,008,634	\$ 936,556	\$ 817,323	\$ 751,293	\$ 786,496	\$ 699,342	\$410,343
\$ 542,345	\$ 446,233	\$ 386,947	\$ 299,042	\$ 429,151	\$ 380,287	\$354,379
48,338	45,750	46,201	53,300	51,588	50,146	41,821
\$ 30,570	\$ 32,545	\$ 28,236	\$ 29,553	\$ 26,163	\$ 22,560	\$ 19,536
\$ 28,344	\$ 27,222	\$ 26,342	\$ 22,153	\$ 19,585	\$ 16,694	\$ 12,422
\$ 32,351	\$ 27,081	\$ 47,087	\$ 48,137	\$ 33,130	\$ 26,545	\$ 23,567
\$ 9,370	\$ 8,370	\$ 8,521	\$ 7,547	\$ 6,271	\$ 5,023	\$ 4,055
—	\$ 1,213	\$ 1,362	\$ 863	\$ 867	\$ 885	—
15,564,578	14,136,834	13,766,773	14,423,465	14,347,131	14,123,872	12,115,450
—	932,356	1,239,183	1,259,263	770,403	788,948	792,023

Directors

Charles F. Adams
Chairman of the Board

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*Retired Chairman of the Board
Boston Edison Company*

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*Dean of Engineering and
Applied Physics
Harvard University*

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First National Boston Corporation*

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*Executive Vice President
Financial Operations
John Hancock Mutual
Life Insurance Company*

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*Vice Chairman of the Board
The Gillette Company*

Albert L. Nickerson
*Retired Chairman of the Board
Mobil Oil Corporation*

Thomas L. Phillips
President

Robert W. Stoddard
*Chairman of the Board
Wyman-Gordon Company*

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William J. Hogan, *Chairman*
Charles F. Avila
Albert L. Nickerson

*Deceased January 21, 1974

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Chairman of the Board

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President

D. Brainerd Holmes
Executive Vice President

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*Vice President
Government Programs*

Everette L. Harper
*Vice President
Corporate Development*

Fritz A. Gross
Vice President, Engineering

W. Rogers Hamel
*Vice President
Corporate Activities
Washington, D.C.*

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*Vice President
Industrial Relations*

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*Vice President
Director, Real Estate Planning*

Philip A. Phalon
*Vice President
International Affairs*

Charles H. Resnick
*Vice President, Secretary
and General Counsel*

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Vice President, Controller

Martin Schilling
*Vice President
Research and Development*

Robert L. Seaman
Vice President, Planning

J.H. Sidebottom
*Vice President
Corporate Communications*

John G. Stobo
Vice President, Manufacturing

G. Richard Westin
Vice President, Treasurer

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Director, Financial Relations

Richard F. Daly
Director, Government Marketing

James M. Hill, Jr.
Director, Procurement

Stephen W. Rowen
Director, Government Contracts

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The Badger Company, Inc.*

Henry M. Chance II
*Chairman of the Board
United Engineers
& Constructors Inc.*

John D. Clare
*Vice President
General Manager
Raytheon Europe*

Thomas M. Dahl
*President
United Engineers
& Constructors Inc.*

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General Manager
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Division*

Luther Davis, Jr.
*General Manager
Research Division*

Palmer Derby
*Vice President
Assistant General Manager
Microwave and Power Tube
Division*

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Caloric Corporation*

Francis M. Dowd
*Vice President
General Manager
Semiconductor Division*

George C. Foerstner
*President
Amana Refrigeration, Inc.*

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*Vice President
Assistant General Manager –
Technical
Missile Systems Division*

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Manager, Equipment
Development Laboratories
Equipment Division*

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*Vice President
President
D.C. Heath and Company*

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Manufacturing Manager
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Caloric Corporation*

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Assistant General Manager –
Technical
Equipment Division*

E. Nevin Kather
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President and General Manager
Raytheon Marine Company and
Sorensen Company*

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Raytheon Service Company*

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Electromagnetic
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Service Corporation*

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